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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/791,527	03/03/2004	Dimitri Sacy	1875.4880001	3355
26111 7590 02/05/2008 STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C. 1100 NEW YORK AVENUE, N.W. WASHINGTON, DC 20005				
			EXAMINER LEE, SIU M	
			ART UNIT 2611	PAPER NUMBER
			MAIL DATE 02/05/2008	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

**Advisory Action
Before the Filing of an Appeal Brief**

Application No.

10/791,527

Applicant(s)

SAEY, DIMITRI

Examiner

Siu M. Lee

Art Unit

2611

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED 14 January 2008 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

1. ☒ The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:

- a) ☐ The period for reply expires _____ months from the mailing date of the final rejection.
b) ☒ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.

Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

NOTICE OF APPEAL

2. ☐ The Notice of Appeal was filed on _____. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

AMENDMENTS

3. ☒ The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because
(a) ☒ They raise new issues that would require further consideration and/or search (see NOTE below);
(b) ☐ They raise the issue of new matter (see NOTE below);
(c) ☐ They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
(d) ☐ They present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: See continuation sheet. (See 37 CFR 1.116 and 41.33(a)).

4. ☐ The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).
5. ☐ Applicant's reply has overcome the following rejection(s): _____
6. ☐ Newly proposed or amended claim(s) _____ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).

7. ☒ For purposes of appeal, the proposed amendment(s): a) ☒ will not be entered, or b) ☐ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.

The status of the claim(s) is (or will be) as follows:

Claim(s) allowed: _____

Claim(s) objected to: _____

Claim(s) rejected: 1-4, 7-11, 14-16, 19-23 and 26.

Claim(s) withdrawn from consideration: _____

AFFIDAVIT OR OTHER EVIDENCE

8. ☐ The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).
9. ☐ The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing of a good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).
10. ☐ The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

REQUEST FOR RECONSIDERATION/OTHER

11. ☒ The request for reconsideration has been considered but does NOT place the application in condition for allowance because:
See continuation sheet.
12. ☐ Note the attached Information Disclosure Statement(s). (PTO/SB/08) Paper No(s). _____
13. ☐ Other: _____

1. Claims 27-29 recites a tone decoder, though this limitation has support in the specification, this limitation raise new issues that would require further consideration.

2. Applicant's argument:

The feature of "the carrier groups are of dynamically variable size" is not taught in the reference Peeters (US 2001/0012783). Paragraph 0023 of Peeters does not teach the limitation "dynamically variable size".

Examiner's response:

Paragraph 0021 of Peeters states that "After channel analysis, the carriers are grouped in subsets of carriers where the same amount of bits will be allocated to and where the applied gain is obtained for through linear interpolation. The subsets of carriers typically will not contain the same number of carriers and the constitution of the subsets will be reported via message from the VDSL receiver to the VDSL transmitter." This paragraph indicates that after channel analysis, the carriers are grouped according to a constellation information message transmitted from the receiver to the transmitter.

Paragraph 0023 states "transmitting and computing bits and gains information may be applied at initialization but alternatively may be applied during operation to adapt the carrier constellation according to changes of the channel characteristics." It is understood that during initialization, the receiver will transmit the constellation information message to group the subcarrier with the same bit information. Paragraph 0023 states that the same operation as the initialization can alternatively be applied during operation according to changes of the channel characteristics. That means all the process during initialization will be repeated during operation; including a regrouping of the carriers according to the latest computed bits and gains information. As the regrouping is being carried out, it satisfied the limitation of "dynamically variable size".

3. Applicant's argument:

The limitation "the at least one carriergroup parameter is a worst case SNR for the at least one carriergroup" is not taught in the Peeters reference.

Examiner's response:

Paragraph 0019 discloses "the channel analysing circuit CHANNEL upon transmission of a predetermined sequence measuring the signal-to-noise ratio for each carrier f0 to f4095, these signal-to-noise ratio values are used by the BiGi_PROD to determine for each carrier subset the number of bits that can be modulated on each carrier of this subset." The number of bits a carrier can transmit depends on the SNR of that carrier, therefore within a group of carriers, the number of bits for that group is determined by the carrier with the lowest signal-to-noise ratio because a carrier with a low signal-to-noise ratio cannot carry more bits. Therefore, the number of bits of the group of carriers is a representation of a worst case SNR for the at least one carriergroup.


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